In the Claims:

Applicant hereby restates the Claims of the present application as follows:

1. (Currently amended) Apparatus for identifying the composition of a sample, the apparatus comprising:

a light source of known wavelength and deviation,

radiation optics coupled to the light source so that light emitted from the light source is directed toward a region on a sample surface causing the sample to produce a characteristic spectrum,

sampling optics situated to receive the characteristic spectrum produced from the sample and direct it toward a spectral analyzer, and

an objective lens common to both the radiation optics and the sampling optics, a holder for the objective lens, the objective lens being eccentrically mounted within the lens holder, and ~~apparatus~~ a motor for ~~moving~~ rotating the objective lens holder in a plane generally parallel to the sample surface so that the light emitted from the light source moves relative to the sample ~~sufficiently to lower the average power density of the light arriving at the region on the sample surface below any light induced detrimental change threshold of the sample~~.

2. (Cancelled)

3. (Cancelled)

4. (Currently amended) The apparatus of ~~any of claims 1-3~~ claim 1 wherein the radiation optics and sampling optics share a common filter, the filter acting on the radiation optics to reflect the light emitted from the light source toward the sample, the filter acting in the sampling optics to block light at the wavelength of the light source from entry into the spectral analyzer.

5. (Original) The apparatus of claim 4 further comprising a band pass filter situated at an output of the light source to define further the deviation of the source.

6. (Currently amended) The apparatus of claim 4 further comprising a probe including a housing having an optical window, the radiation optics optically coupling the light source to the housing optical window so that light emitted from the light source is directed through the window toward a sample ~~causing the sample to produce a characteristic spectrum~~.

7. (Original) The apparatus of claim 6 wherein the probe housing includes a handle to permit manipulation of the probe and further comprises a trigger coupled to the light source.

8. (Original) The apparatus of claim 6 wherein the housing comprises an elongated rail having a lower and an upper surface and a tubular member including a longitudinal slot receiving the rail so that an axis of revolution of the tubular member is parallel to the rail upper surface and is aligned with said optical window.

9. (Original) The apparatus of claim 8 further comprising a plurality of supports fixed to the rail upper surface for supporting optical elements to intersect the axis of revolution, a back plate closing one end of the tubular member, and a nose cone closing another end of the tubular member, the nose cone containing the optical window.

10. (Original) The apparatus of claim 8 further comprising a band pass filter situated in the housing in spaced relation from the light source, and a baffling tube fixed within the housing contiguous to the band pass filter to form a segregated region within the housing for absorbing radiation reflected by the band pass filter.

11. (Original) The apparatus of claim 7 wherein said trigger is connected to said motor so that depression of the trigger causes movement of the objective lens holder in a plane generally perpendicular to an axis of the holder passing through the optical window.

12. (Original) The apparatus of claim 11 wherein the movement of the objective lens holder is between about 0.1 and 100 cm/sec.

13.(Original) The apparatus of claim 11 wherein the movement of the objective lens holder is at a frequency of between about 0.1 and 100 Hz.

14.(Original) The apparatus of claim 11 wherein the movement of the objective lens holder is rotational between about 0.1 and 100 rev/sec.

15. (Original) The apparatus of claim 14 wherein the objective lens is eccentrically positioned within the lens holder by about 0.05 to 1.0 cm.

16. (Currently amended) Apparatus for identifying the composition of a sample, the apparatus comprising:

a probe including a housing having an optical window located on an axis of the probe, and a light source of known wavelength and deviation situated within the

probe,

radiation optics coupled to the light source so that light emitted from the light source is directed through the optical window toward a region on a sample surface causing the sample to produce a characteristic spectrum,

sampling optics situated to receive the characteristic spectrum produced from the sample through the optical window and direct it toward a spectral analyzer, and

an objective lens common to both the radiation optics and the sampling optics, a holder for the objective lens situated adjacent to the optical window, the objective lens being eccentrically mounted within the lens holder, and ~~apparatus~~ a motor for ~~moving~~ rotating the objective lens holder in a plane generally perpendicular the probe axis so that the light emitted from the light source moves relative to the sample ~~sufficiently to lower the average power density of the light arriving at the region on the sample surface below any light induced detrimental change threshold of the sample~~.

17. (Cancelled)

18. (Currently amended) The apparatus of claim ~~17~~ 16 wherein the movement of the objective lens holder is rotational between about 0.1 and 100 rev/sec.

19. (Currently amended) The apparatus of claim ~~17~~ 16 wherein the objective lens is eccentrically positioned within the lens holder by about 0.05 to 1.0 cm.

20. (Currently amended) The apparatus of ~~any of claims 16-19~~ claims 16, 18 or 19 wherein the probe housing includes a handle to permit manipulation of the probe and further comprises a trigger coupled to the light source and the motor so that depression of the trigger causes movement of the objective lens holder in a plane generally perpendicular to an axis of the housing passing through the optical window.

21. (Original) The apparatus of claim 20 wherein the radiation optics and sampling optics share a common filter, the filter acting on the radiation optics to reflect the light emitted from the light source toward the sample, the filter acting in the sampling optics to block light at the wavelength of the light source from entry into the spectral analyzer.

22. (Original) The apparatus of claim 20 wherein the housing comprises an elongated rail having a lower and an upper surface and a tubular member including a

longitudinal slot receiving the rail so that an axis of revolution of the tubular member is parallel to the rail upper surface and is aligned with said optical window.

23. (Original) The apparatus of claim 22 further comprising a plurality of supports fixed to the rail upper surface for supporting optical elements to intersect the axis of revolution, a back plate closing one end of the tubular member, and a nose cone closing another end of the tubular member, the nose cone containing the optical window.

24. (Original) The apparatus of claim 22 further comprising a band pass filter situated in the housing in spaced relation from the light source, and a baffling tube fixed within the housing contiguous to the band pass filter to form a segregated region within the housing for absorbing radiation reflected by the band pass filter.

25. (Original) The apparatus of claim 20 further comprising a band pass filter situated at an output of the light source to define further the deviation of the source.

26. (New) Apparatus for identifying the composition of a sample, the apparatus comprising:

a probe including a housing having an optical window, the housing comprises an elongated rail having a lower and an upper surface and a tubular member including a longitudinal slot receiving the rail so that an axis of revolution of the tubular member is parallel to the rail upper surface and is aligned with said optical window,

a light source of known wavelength and deviation coupled to the probe, radiation optics coupled to the light source so that light emitted from the light source is directed through the optical window toward a region on a sample surface causing the sample to produce a characteristic spectrum,

sampling optics situated to receive the characteristic spectrum produced from the sample and direct it toward a spectral analyzer, the radiation optics and sampling optics sharing a common filter, the filter acting on the radiation optics to reflect the light emitted from the light source toward the sample, the filter acting in the sampling optics to block light at the wavelength of the light source from entry into the spectral analyzer,

a band pass filter situated in the housing in spaced relation from the light source, and a baffling tube fixed within the housing contiguous to the filter to form a

segregated region within the housing for absorbing radiation reflected by the band pass filter, and

an objective lens common to both the radiation optics and the sampling optics, a holder for the objective lens, and apparatus for moving the objective lens holder in a plane generally parallel to the sample surface.

27. (New) The apparatus of claim 26 further comprising a motor for vibrating the lens holder to achieve movement of the light on the sample surface.

28. (New) The apparatus of claim 26 wherein the probe housing includes a handle to permit manipulation of the probe and further comprises a trigger coupled to the light source.

29. (New) The apparatus of claim 28 wherein the trigger is coupled to the objective lens holder moving apparatus so that depression of the trigger causes movement of the objective lens holder in a plane generally perpendicular to said axis of the holder passing through the optical window.

30. (New) The apparatus of claim 26 further comprising a plurality of supports fixed to the rail upper surface for supporting optical elements to intersect the axis of revolution, a back plate closing one end of the tubular member, and a nose cone closing another end of the tubular member, the nose cone containing said optical window.

31. (New) The apparatus of claim 26 wherein the movement of the objective lens holder is between about 0.1 and 100 cm/sec.

32. (New) The apparatus of claim 26 wherein the movement of the objective lens holder is at a frequency of between about 0.1 and 100 Hz.

33. (New) Apparatus for identifying the composition of a sample, the apparatus comprising:

a probe including a housing having an optical window and a light source of known wavelength and deviation, the housing having a handle to permit manipulation of the probe with a trigger coupled to the light source,

radiation optics coupled to the light source so that light emitted from the light source is directed through the optical window toward a region on a sample surface,

sampling optics situated to receive the characteristic spectrum produced from the sample and direct it toward a spectral analyzer, the radiation optics and sampling

optics sharing a common filter, the filter acting on the radiation optics to reflect the light emitted from the light source toward the sample, the filter acting in the sampling optics to block light at the wavelength of the light source from entry into the spectral analyzer, and

an objective lens common to both the radiation optics and the sampling optics, a holder for the objective lens, a motor for moving the objective lens holder, the trigger being coupled to the motor so that depression of the trigger causes movement of the objective lens in a plane generally parallel to the sample surface so that the light emitted from the light source moves relative to the sample.